

Description of Map Units

	Alluvial deposits in washes and on fans — Silt, sand, and gravel deposited on piedmont
af	Alluvial deposits in washes and on fans — Silt, sand, and gravel deposited on piedmont slopes after regression of Lake Bonneville. Locally a few tens of feet thick.

Fine-grained lacustrine deposits — Clay, silt, and sand deposited in ephemeral lakes; locally may include minor evaporites. Interfingers with alluvium at edge of lake flats.

May be a few tens of feet thick.

Lacustrine lagoon deposits — White, tan, or light-gray fine sediments deposited in

lacustrine lagoon deposits — White, tan, or light-gray line sediments deposited in lagoons behind gravel bars of Lake Bonneville (Qlg) at many levels. Most deposits less than 10 feet (3 m) thick.

Lacustrine marl — White to light-gray, fine-grained, thinly bedded to laminated marl

deposited in Lake Bonneville. As much as 12 feet (3.6 m) thick locally.

Lacustrine gravel — Sandy, pebbly, cobbly, and bouldery deposits along Lake Bonne-

ville shorelines at many levels. Where shore impinged against Tsr or Tld these deposits are exceptionally bouldery. Individual shoreline deposits are usually less than 20 feet (6 m) thick.

Lacustrine and alluvial deposits undifferentiated — Deposits on piedmont slopes where

pre-Lake Bonneville alluvium has been reworked but where the lacustrine component is thin. Pre-Bonneville fan deposits may be several hundred feet thick locally.

Mudflow deposit — Clay, silt, and gravel that crosses Lake Bonneville shoreline features. No more than 15 feet (4.6 m) thick.

Skull Rock Pass Conglomerate — Unsorted, uncemented bouldery conglomerate with a partly bentonitic, silty to fine sandy matrix. Matrix erodes away to leave desert armor of cobbles and boulders almost all of which were derived from Cambrian, Ordovician, and Silurian strata west of the quadrangle. Conglomerate is at least 150 feet (45 m) thick and may be as much as 200 feet (61 m) thick.

Red Knolls Tuff — Pink,crystal-rich,ash-flow tuff with various degrees of welding and resistance to erosion. Basal vitrophyre present locally; fiamme abundant in some horizons; lithic fragments widespread except near top. About 210 feet (64 m) thick.

Volcanic conglomerate of Little Drum — Boulder conglomerate composed mostly of

rounded basaltic andesite boulders; interstices between rounded boulders are cobbles and smaller clasts of the same composition. Unit is poorly cemented and wave action of Lake Bonneville has reworked this conglomerate leaving boulder-strewn outcrops without matrix. A thickness of about 180 feet (55 m) of this unit is exposed in the quadrangle but it could be thicker in the subsurface on the east side of the quadrangle.

Explanation of Map Symbols

Geologic contact — Dashed where less certain.

Normal fault — Bar and ball on downthrown side; dashed where inferred, dotted where concealed.

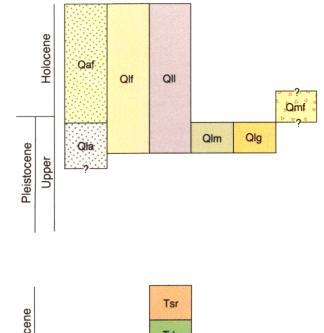
Provo shoreline of Lake Bonneville — dotted where indistinct; about 4,787 feet (1,459 m).

Bonneville shoreline of Lake Bonneville — Elevation about 5,170 feet (1,576 m).

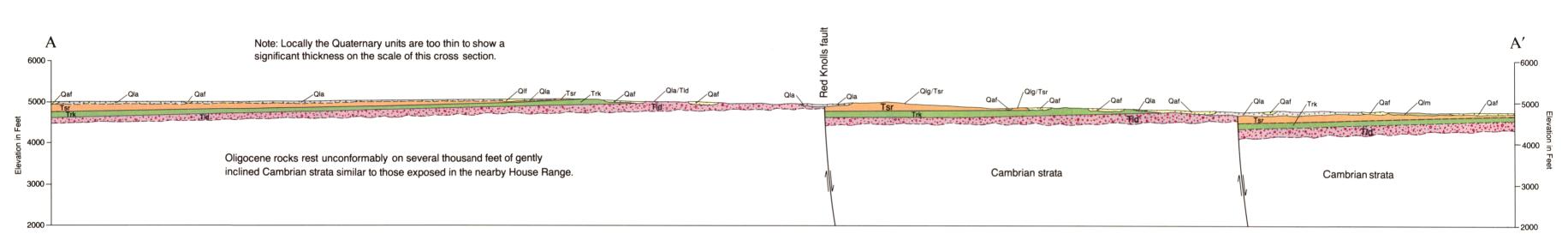
Qlg/Tsr Surficial deposit is Qlg and underlying unit is Tsr.—Used where the surficial unit is thinner than in areas where it is mapped separately.

	Formation	Map Symbol	Thickness in Feet (m)	Lithology	
OLIGOCENE	Skull Rock Pass Conglomerate	Tsr	200 (61)		bentonitic matrix locally boulders up to 15 feet (4.6 m) across occur rarely
	Red Knolls Tuff	Trk	210 (64)		local fiamme layers 30-32 m.y. local basal vitrophyre
EOCENE	Volcanic conglomerate of Little Drum	Tld	180+ (55+)		reddish clayey matrix in middle of exposed section 39 m.y. base not exposed

Correlation of Map Units







Scale 1:24,000. No vertical exaggeration.

